

MASPS for ADS-B

Rev. A

Tracking Information (committee secretary only)	
Change Issue Number	17
Submission Date	1/12/01
Status (open/closed/deferred)	REJECTED
Last Action Date	2/28/01

Short Title for Change Issue:	Use of TIS-B for integrity enhancement
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MASPS Document Reference:		Originator Information:	
Entire document (y/n)	Y	Name	Stephen Heppe/ADSI Inc
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Paragraph number(s)	TBD	E-mail	steveheppe@adsi-m4.com
Table/Figure number(s)		Other	

Proposed Rationale for Consideration (originator should check all that apply):	
<input type="checkbox"/>	Item needed to support of near-term MASPS/MOPS development
	DO-260/ED-102 1090 MHz Link MOPS Rev A
<input checked="" type="checkbox"/>	ASA MASPS
<input checked="" type="checkbox"/>	TIS-B MASPS
<input type="checkbox"/>	UAT MOPS
<input type="checkbox"/>	Item needed to support applications that have well defined concept of operation
<input type="checkbox"/>	Has complete application description
<input type="checkbox"/>	Has initial validation via operational test/evaluation
<input type="checkbox"/>	Has supporting analysis, if candidate stressing application
<input type="checkbox"/>	Item needed for harmonization with international requirements
<input type="checkbox"/>	Item identified during recent ADS-B development activities and operational evaluations
<input type="checkbox"/>	MASPS clarifications and correction item
<input type="checkbox"/>	Validation/modification of questioned MASPS requirement item
<input type="checkbox"/>	Military use provision item
<input checked="" type="checkbox"/>	New requirement item (must be associated with traffic surveillance to support ASAS)

Nature of Issue:	<input type="checkbox"/>	Editorial	<input type="checkbox"/>	Clarity	<input checked="" type="checkbox"/>	Performance	<input checked="" type="checkbox"/>	Functional
<u>Issue Description:</u> Noting that: a) The current operations concept for TIS-B assumes ADS-B is available on the aircraft; b) The ADS-B information may not always have sufficient integrity to support desired applications; c) Providing for high integrity under all operating conditions could lead to significantly higher cost; d) The ground surveillance function can verify the integrity of ADS-B information through various techniques such as trilateration and multi-sensor fusion; and e) Applications requiring high integrity and small airborne separations are associated with dense airspace where ground infrastructure is available, It appears that the ground service provider can offer an integrity enhancement and allocating the integrity function to the ground can reduce the cost and complexity of the airborne equipment.								

Originator's proposed resolution:

We recommend that the integrity requirements for airborne equipment should be held to the point where cost is not significantly affected, and that any additional integrity requirement (i.e., in order to enable a particular application) should be addressed by the ground infrastructure and service provider via TIS-B.

Working Group 6 deliberations:

February 28, 2001: This Issue Paper was discussed by the ad hoc group at their February 2001 meeting. It was agreed that this Issue Paper will be REJECTED because it is out of scope for the ADS-B MASPS. Instead of addressing this in the ADS-B MASPS, it will be forwarded to WG4 for their consideration. At the ASA MASPS level.